Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Gramercy Alumina LLC
Gramercy Alumina LLC - Gramercy Alumina Central Burial Site
Gramercy, St. James Parish, Louisiana
Agency Interest Number: 1388
Activity Number: PER20080007
Proposed Permit Number: 3069-V0

I. APPLICANT

Company:
Gramercy Alumina LLC - Gramercy Works
1111 N Airline Hwy Ste 3370
Gramercy, Louisiana 70052

Facility:
Gramercy Alumina LLC
1111 N Airline Hwy
Gramercy, St. James Parish, Louisiana

II. FACILITY AND CURRENT PERMIT STATUS

The Gramercy plant consists of an alumina extraction facility, in which bauxite is received at the plant's dock facilities on the Mississippi River and stored in bulk prior to being processed in the plant. Alumina is extracted from the bauxite in the plant's processing facilities using the Bayer process. Various alumina products are produced, which are stored on site prior to shipment by rail and truck.

This permit application identifies emission sources and emissions generating activities that are expected to be associated with the Central Burial Site Remediation project. Excavation and a pin mill will be used to remediate soils at the Central Burial Site which are contaminated with monochlorobenzene.

Gramercy Alumina LLC - Gramercy Works is a designated Part 70 source. Several Part 70 permits have been issued to the operating units within the complex. These include:

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Permit No.	Unit or Source	Date Issued
2481-V1	Red Mud Management Area	September 24, 2007
2387-V0	Cajunite Area	July 21, 2003
2453-V1	Bauxite Processing/Products/ Power Areas	April 29, 2005

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by Gramercy Alumina LLC on October 9, 2008, requesting an Initial Part 70 operating permit.

Project

This permit application identifies emission sources and emissions generating activities that are expected to be associated with the Central Burial Site Remediation project. Excavation and a pin mill will be used to remediate soils at the Central Burial Site which are contaminated with monochlorobenzene.

Proposed Permit

Permit No. 3069-V0 will be the initial Part 70 operating permit for Gramercy Alumina Central Burial Site.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Emissions in tons per year
PM_{10}	8.92
SO_2	<0.01
NO_X	1.24
CO	0.72
VOC	30.71
TSP	18.79

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LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Emissions in tons per year
Chlorine	0.005
Hydrochloric Acid	1.36
Chlorobenzene	5.898
Napthalene and methylnaphthalenes	<0.01
Polynuclear Aromatic Hydrocarbons	0.025
Total	7.244

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
EQT 165 1-08 RTO	Source does not have the potential to emit 5 TPY or more of sulfur dioxide per year	EXEMPT. LAC 33:III.1502.A.3
	Source is not located in the Baton Rouge Nonattainment Area of the Region of Influence.	DOES NOT APPLY. LAC 33:III.2201.A.1

Prevention of Significant Deterioration/Nonattainment Review

PSD review was not required.

Streamlined Equipment Leak Monitoring Program

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
Central Burial Site Remediation	No streamlined programs		

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MACT Requirements

The facility is subject to 40 CFR 63 DD, PP and GGGGG.

Air Quality Analysis

Emissions associated with the proposed Central Burial Site Remediation project were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

A permit shield was not requested.

VI. PERIODIC MONITORING

The facility will comply with all monitoring requirements as specified in 40 CFR 63 H, DD, PP and GGGGG.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: $\geq$ 10 tons per year of any toxic air pollutant; $\geq$ 25 tons of total toxic air pollutants; and $\geq$ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10} – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those,

which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.